Polarization Independent Isolator Core
(DL-IC-W-XX-Y-Z)

The Polarization Insensitive Isolator Core is a component (Faraday Rotator based) for in-line fiber optic isolator. It can also block back reflection and enhance device isolation. Besides being insensitive to the input beams polarization state, it also has high isolation, low insertion loss, low PDL and low PMD.

### A. Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Single Stage (nm)</th>
<th>Dual Stage (nm)</th>
<th>Single Stage (dB)</th>
<th>Dual Stage (dB)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Wavelength (λc)</td>
<td>1310</td>
<td>1550</td>
<td>1060</td>
<td>1060</td>
<td>nm</td>
</tr>
<tr>
<td>Typ. Isolation</td>
<td>42</td>
<td>52</td>
<td>38</td>
<td>52</td>
<td>dB</td>
</tr>
<tr>
<td>Min. Isolation, 23 °C</td>
<td>40</td>
<td>46</td>
<td>35</td>
<td>45</td>
<td>dB</td>
</tr>
<tr>
<td>Max. Insertion Loss, 23 °C</td>
<td>0.12/0.15¹</td>
<td>0.25</td>
<td>1</td>
<td>2</td>
<td>dB</td>
</tr>
<tr>
<td>Max. Polarization Dependent Loss, 23 °C</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>dB</td>
</tr>
<tr>
<td>Max. Polarization Mode Dispersion</td>
<td>0.2/0.05¹</td>
<td>0.05</td>
<td>----</td>
<td>----</td>
<td>ps</td>
</tr>
<tr>
<td>Max. Optical Power (Continuous Wave)</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td>mW</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-5 to +70</td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to +85</td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

¹ For PMD Compensated Version

### B. Package Dimensions

- Optical Path Orientation
- Rotator + Wedges
- Holder
- 3.9 mm
- 2.9 mm
- 1.5 mm single stage
- 3.0 mm single stage low PMD version & dual stage

### C. Ordering Information

**DL-IC-W-XX-Y-Z**

- **W**: Stage
- **XX**: Wavelength
- **Y**: PMD Requirement
- **Z**: Optical Path Orientation

1 - Single stage
   - 1 - Single stage 31 - 1310 nm
   - 1 - 0.05 ps max.
   - F - Forward (as indicated above)
2 - Dual stage
   - 2 - Dual stage 55 - 1550 nm
   - 2 - Refer to above spec.
   - B - Backward

- 06 - 1060 nm
- SS - Specify